

Grade 8 Academic Standards

Unit 4 Lesson

Science

Standard 1 The Nature of Science and Technology

Technology and Science

8.1.6 Identify the constraints that must be taken into account as a new design is developed, such as gravity and the properties of the materials to be used.

Standard 2 Scientific Thinking

Communication

8.2.7 Participate in group discussions on scientific topics by restating or summarizing accurately what others have said, asking for clarification or elaboration, and expressing alternate positions.

8.2.8 Use tables, charts, and graphs in making arguments and claims in , for example, oral and written presentations about lab or fieldwork.

Standard 3 The Physical Setting

The Earth and the Processes that Shape It

8.3.7 Explain that the atmosphere and the oceans have a limited capacity to absorb wastes and recycle materials naturally.

Standard 4 The Living Environment

Interdependence of Life and Evolution

8.4.8 Describe how environmental conditions affect the survival of individual organisms and how entire species may prosper in spite of the poor survivability or bad fortune of individuals.

Social Studies

Standard 2 Civics and Government

Foundations of Government

8.2.4 Define and explain the importance of individual and civic responsibilities.

Unit 4 - Activities 1-5 satisfy the following Indiana academic standards:

Science

8.2.7 Participate in group discussions on scientific topics by restating or summarizing accurately what others have said, asking for clarification or elaboration, and expressing alternative positions.

8.3.6 Understand and explain that the benefits of the Earth's resources, such as fresh water, air, soil, and trees, are finite and can be reduced by using them wastefully or by deliberately or accidentally destroying them.

8.3.7 Explain that the atmosphere and the oceans have a limited capacity to absorb wastes and recycle materials naturally.

8.4.8 Describe how environmental conditions affect the survival of individual organisms and how entire species may prosper in spite of the poor survivability or bad fortune of individuals.